

WOMBWELL
URBAN DISTRICT COUNCIL.



REPORT
OF
The Medical Officer
of Health
FOR THE YEAR 1919.



WOMBWELL :
Albert Taylor & Sons, Printers, Station Road.
1919.

SUMMARY OF REPORT

FOR THE YEAR 1919.

Area of Urban District	...	...	3,850 Acres
Population at Census, 1911	..	...	17,538
Population estimated by Registrar-General for 1919—			
For Birth Rate	...	...	17,795
For Death Rate	.	...	17,083
Excess of Births over Deaths for 1919	...		261
No. of Houses occupied at end of 1919	...		3,665

VITAL STATISTICS.

Birth Rate	...	...	29 per 1,000
Death Rate (All Causes)	...	...	15 „ „
„ Phthisis	...	...	·87 „ „
„ Zymotic Diseases	...	...	·82 „ „
„ Respiratory Diseases	...	...	2·7 „ „
Infantile Death Rate	...	123 per 1,000 Nett Births	

Wombwell Urban District Council.

Medical Officer's Annual Report.

Town Hall,
Wombwell,
April, 1920.

**To the Chairman and Members of the Wombwell
Urban District Council.**

GENTLEMEN,

I have the honour of submitting for your consideration my Eleventh Annual Report on the Health and Sanitary Conditions of your district for the year 1919.

The area of the district is 3,851 acres. The surface of the land is undulating and the average height above sea level is 200 feet. It is divided into Five Wards:—South-East, South-West Central, North and Hemingfield.

The chief occupations of the population are coal mining, glass bottle making, the manufacture of by-products from coal and the various occupations pertaining to iron founding.

The total Amount of Poor Law Relief for the district during the past year was £3,054-6-7.

There is no Hospital within the district, the bulk of these cases are treated at the Beckett Hospital, Barnsley, a large number of the more serious cases attend the Sheffield Hospitals and a few go to Leeds.

The Registrar General has again supplied me with his estimates of the population, which for the death rate is 17,083 and for the birth rate 17,795. These estimates are based mainly on the "rationing returns" for the district, but as these should be increased by the large numbers of soldiers who have returned home during the past year, they should shew an increase on similar estimates for 1917, instead they shew a decrease of 868; further, the natural increase or excess of births over deaths during 1919 equals 261; in my opinion, the estimate of the population should be AT LEAST the Registrar General's estimate for 1917 plus the natural increase of 261 which amounts to 18,613, even this is much below the correct figures and is not taking account of the large number of soldiers who have returned home from active service to work in the mines.

Assessing the death rate on the Registrar General's figures it amounts to 15 per 1,000 and the birth rate 29 per 1,000, on my own estimate of the population, the figures are 12·8 and 25 respectively and this approximates more nearly as in former years to the death rate for England and Wales which is 13·8; the birth rate for the same being 18·5 per 1,000.

Mortality Returns.

There occurred in the township during the year 1919 224 civilian deaths, of these, three occurred in non-residents reducing the number to 221, in addition, 35 persons belonging to this district died away from home, the nett total being 256—140 males and 116 females.

The death rates are given above ; in 1918 it was 21, and in 1917 13·4 per 1,000.

The birth rate also in common with the rest of England and Wales shews a decline, as the rate was 31 per 1,000 births in 1918. The birth rate for England and Wales for the past year was 18·5 per 1,000 living.

There were 16 inquests and six illegitimate deaths in children.

The number of births registered during the period under review was 518—261 males and 257 females, and the rate is as above. This number includes 22 illegitimate births, a ratio of 4%. A rather curious point is that there have been 52 births less than in the previous year. There were 21 still-born babies interred at the Wombwell Cemetery and 6 at Hemingfield Cemetery.

As the third and last epidemic of influenza occurred in the early month of 1919, a large number of deaths, 51 in all, resulted from this disease. Also as a further consequence of the epidemic, the number of deaths from pulmonary diseases, excluding phthisis, was again high, there being 46 deaths from these complaints.

From measles and whooping cough there were only 7 deaths, compared with 53 for the previous year owing to the extensive epidemic during 1918.

Twenty-six deaths occurred from tuberculous diseases during the year being two less than 1918.

Diarrhœa was responsible for 7 deaths, the same number as last year. The comparatively cool and wet summer being, in my opinion, a contributory cause to the diminution of the number of cases.

Deaths from violence were six in number, about half the number for the previous year. •

The number of deaths in infants under one year during the year under review was 64, of these 7 were illegitimate children. The rate per 1,000 nett births is 123; in 1918 it was 107 and the year previous 143. We are still below that of England and Wales which for this year is 89. This difference mainly is due to our comparatively large birth rate which is more than 50% higher than that for England and Wales. It is a known fact that a high birth rate results in the presence of a large number of persons in the early years of life, at which, owing to the high susceptibility to several diseases, the death rate is comparatively high. The infantile death rate is however a great improvement upon the average for the past ten years.

Ward Statistics.

		S.E.	S.W.	C.	N.	H.
Approximate Population	...	3718	4110	4491	3984	4441
All Deaths (Civilian)	...	47	41	49	46	74
Death Rate (All Causes)	...	12	10	11	11.5	16
Births	...	112	89	104	96	117
Birth Rate	...	30	21	23	24	27
Infantile Deaths	...	15	9	11	11	21
Infantile Death Rate per						
1,000 Births	...	134	101	106	114	179
Illegitimate Births	...	3	2	5	2	10
„ Deaths	...	1	1	1	1	3

SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water Supply.

The water supply of the district is obtained mainly from artesian wells supplemented by a reservoir fed by a small stream. The water is pure in quality, no plumbo-solvent action, as a fair

amount of lime salts are in solution and is practically free from possibilities of contamination. The supply has been ample and sufficient to the lower levels, but was at times during the year seriously intermittent at the higher levels particularly Jump and Hemingfield and this was unfortunately more marked in the summer months when a more abundant supply is necessary in order to conserve the public health.

The cause of this deficiency in supply will in all probability be removed in the near future and it is hoped that the result will be a constant and adequate supply to all parts.

Drainage and Sewerage.

The drainage and sewerage system throughout the district is for the most part satisfactory and during the year improvements have been carried out by the relaying of part of the main sewer at Hemingfield and various extensions of existing sewers.

The condition of the main Sewage Works at New Scarborough has been unsatisfactory for some years, and its reconstruction has been held up during the War. Now, however, extensive new works are necessary and a new scheme has been prepared by Messrs. Balfour and Son, of Newcastle.

The present capacity of the works is for dealing with a population of 14,000 and it is now proposed that the new works will be able to deal easily with one of 20,000. Part of the old works are to be utilised such as the existing tank which will be lined by ferro concrete, but the main works will be constructed on land adjoining the New Scarborough Sewage Farm. A new engine house with a triple set of engines able to deal with every emergency will be erected to pump the sewage into the equalising tank. From this it will gravitate slowly into the four sedimentation tanks

and thence to a dosing chamber and so to the six new percolating filters. The Broomhill sewage which has always been a problem for satisfactory solution, will be pumped automatically through a pumping main direct to the equalising tank at New Scarborough and thus will effectually dispose of what has frequently been the cause of much anxiety to the staff owing to the land subsidence in that district.

Closet Accommodation.

At the end of the year there were 1,561 privies with covered middens, 977 water-closets, 118 waste water closets, and 14 pail-closets in use in the district.

There were 61 privies converted into water-closets during the year and two privies were re-constructed. Ten new additional water-closets were provided for old property where there was insufficiency of closet accommodation.

The conversion of insanitary privies into the water carriage system has been proceeded with whenever possible, but there are still an undue proportion of privies, and the Council are entering upon a scheme to carry out these conversions more speedily and gradually abolish the insanitary privy for all time.

Scavenging.

This is carried out by the Council's own staff supplemented by hired carting. An additional horse and cart were acquired to enable the staff to deal with the removal of refuse in a satisfactory manner. During the year 11,301 loads of dry refuse were carted to the tips and 6,108 loads of nightsoil were led on to the land for farmers' use. The total cost of this was £3,727.

The cesspools, twelve in number, are emptied weekly by a special staff and removed on to the land.

There is at present no destructor; this would be a valuable asset to the sanitary staff and the provision of one is seriously contemplated by the Sanitary Committee in the near future.

Sanitary Inspection of District.

The number of sanitary inspections made in 1919 was 5,735. In connection with this 517 informal notices were served and of these 493 were complied with.

Statutory notices were served upon the owners of 38 houses under the Housing Acts and in 30 cases they were satisfactorily complied with.

Action was also taken under the Public Health Acts in the case of 31 houses, and all these notices were complied with.

Classified as to nature of defects or nuisances discovered they are as follows :—

STATUTORY.				OTHER.			
Overcrowding	...	...	36	Blocked and Defected Drains			
Dirty Houses	...	...	15	and W.C.'s	..	...	237
Dampness	...	...	24	Overcrowding	...	...	12
Inadequate Ventilation	...	...	21	Insanitary Privies & Ashpits			120
Insufficient or Insanitary				Insanitary Houses	...	...	23
Privies	...	...	26	Defective Sink Pipes		...	11
Insanitary Yards	...	...	56	Insanitary Yards	...	...	26
Defective Sink Pipes		...	8	Various	...	...	37

The inspections carried out by the Sanitary Inspector comprise the following :—

Statutory House to House	...	...	289
Other Houses	...	...	73
Slaughterhouses	...	...	236
Workshops	...	...	117
Cowsheds	...	...	225
Canal Boats	...	...	9
Tents and Vans	..	...	24
Nuisances	...	...	4762
„ Reported	...	...	614
„ Abated	...	...	598
Total Number of Inspections	...	...	5735

SANITARY CONDITION.

Schools.

Speaking generally the sanitary condition of the various public elementary schools is good. The authorities, however, are chary of the amount of water used for flushing the closets and urinals, even when a good supply has been available and, in my opinion, twice the number of flushings per diem would be a sanitary advantage at all the schools.

At the Barnsley Road Infants, the number of closets available are deplorably insufficient and most of the seats are in need of repair, all or part of the wood seating having disappeared.

During the epidemic of measles, the various head teachers were asked to notify me of the first cases occurring in their schools. I instituted one or two short class closures, but it was apparent that it has no effect on the restriction of the epidemic, as, in a large number of instances the disease broke out in children below school age and then extended to the school-going and susceptible members of the household.

An epidemic of scarlet fever on a small scale broke out in the Hemingfield District near the close of the year.

As only two classes were affected, I visited and examined every contact, excluding three children who were suspected of having had the disease in a very mild form; that ended the outbreak very shortly.

All the schools have been regularly and thoroughly disinfected by spraying with formalin not only during each holiday, but after every closure and class closure as well.

Food.

The milk supply produced in the district is safeguarded from tubercular infection by a half-yearly inspection of the cows by an appointed veterinary surgeon. During the year one sample of milk which was sent by the Sanitary Inspector to the Council Hall for bacteriological examination proved to be tuberculous, and the animal was therefore destroyed. As the supply produced locally was insufficient for the needs of mothers and children, 420 gallons weekly were obtained by train from Grassington.

A large number of householders preferred either tinned or dried milk preparations for domestic use and the latter especially was largely made use of by the mothers attending the Infant Welfare Centre for themselves and their infants.

During the year the various premises used for the preparing, storing or exposing for sale of foodstuffs were frequently inspected by the Sanitary staff. There were 71 seizures of unsound food mostly beef and mutton, and there were 15 carcasses of tuberculous beef condemned for destruction. There are nine licensed slaughterhouses in the district, all privately owned, these were made the subject of 236 visits by the Inspector during the year and their condition was generally satisfactory.

There is no public abattoir at present, but the provision of one in the near future is under consideration. This would greatly facilitate the work of the inspector in his being able positively to make his visit AT THE TIME OF SLAUGHTERING : at present he endeavours to carry this out at the various slaughterhouses as far as possible, but obviously this is not so simple as if there was one building only used for this purpose.

INFECTIOUS DISEASE.

Scarlet Fever.

During the year there were notified 42 cases of this disease and all of them occurred during the last six months of the year.

In the month of December a small epidemic broke out in the Hemingfield Ward, and I detailed one of the Health Visitors to carry out the Milne treatment in suitable cases, as this method of treating this disease proved very successful a few years ago. In all, she paid 123 visits to 13 patents. In addition, cases of scarlet fever in overcrowded houses were visited by the nurse and anointed with eucalyptus oil, with nose and throat treatment, in order to minimise the risk of further cases pending the removal of the child to Hospital. It is interesting to note that no second case occurred in any of the houses she visited.

Of complications only one was of any importance - a septic throat - and all the cases recovered.

They were distributed in the wards as follows :

S.E.	S.W.	C.	N.	H.
12	5	3	8	14

I visited the various schools and examined all the children in the affected classes. I excluded three children from one school who were suspicious of having had the disease and no other case was reported from that quarter.

Of those who were removed to Hospital there was one "return" case and two others contracted the disease while visiting away from home.

Enteric Fever.

There was one case notified in each of the following months: January, June, September, November and December. All were removed to Hospital. The disease was generally of a very mild type and there were no deaths. One of these pointed strongly to the presence of a carrier in the person of a lodger who had had the disease a year before; he left the district at the time the patient was taken ill and could not subsequently be traced.

Diphtheria and Membranous Croup.

Eight cases occurred in the township during the year, of these, four were efficiently isolated at home and the remainder were sent to Hospital. Free supplies of antitoxin were available at the Town Hall for the use of all the doctors and these were utilised with useful effect. There were no deaths.

There has been no case of Small Pox in the district nor in the neighbourhood during the year. No vaccination or re-vaccinations have been undertaken by the Medical Officer of Health. No case of locally contracted anthrax or rabies has occurred in the township during the year 1919.

In every case after the removal of a case of acute infectious disease and also after those suffering from pulmonary tubercle, the apartments are formalin stoved by the Sanitary Staff and instructions given for subsequent thorough cleansing. In suitable cases the steam disinfectant at the Fever Hospital is made use of.

Influenza.

The third epidemic of this terrible plague began early in February and lasted until the end of April. There were 51 deaths which were fairly evenly distributed as regards age, groups and locality.

Information was distributed in the form of handbills and posters to every house throughout the district. Ventilation was efficiently inspected at the various Picture Houses and other places of entertainment, the managers being evidently desirous of doing their best to co-operate with the Sanitary staff by excluding children under twelve and providing a free circulation of fresh air during and between the performances. The various schools were closed for short periods mainly owing to the depletion of staff.

No cases required free medical assistance in this district.

We were fortunate in obtaining for a time the services of a hospital sister who was staying here for a few weeks. She was detailed to visit every urgent case to give help and advice in nursing and was eagerly sought after by the patients' friends. I was unable, however, to obtain any reliable nursing assistance later on, as nurses were unobtainable and the only handy women available were down with the epidemic at the time I visited them.

A full report of the whole epidemic was drawn up by the Medical Officer of Health and forwarded to the Ministry of Health about the middle of the year 1919.

Polio-Encephalitis.

One case of this rare disease was notified as such in January and removed to the Fever Hospital at Barnsley. Bacteriological examination however subsequently proved the case to be one of Cerebro Spinal Fever. After a long illness the child got quite well.

Acute Influenzal Pneumonia.

Was first made a notifiable disease on March 1st, 1919, and from then to the end of the year 98 cases were notified at the Town Hall.

The age incidence was as follows :

Under 1 year	...	5 cases
1 - 5 years	...	40 „
5 - 15 years	...	28 „
15 - 25 years	...	8 „
25 - 65 years	...	17 „
Over 65 years	...	Nil.

The majority of the cases were evidently broncho-pneumonia in children, only about 25% notified being over 15 years of age.

There were reported 16 cases of malaria and one of dysentery, all in soldiers recently returned from abroad, where these diseases were prevalent. There was no case amongst the civilian population. Some of these were removed to the Fever Hospital, but the majority of them were allowed to stay at home, as by the time the notification was received and acted upon the patient was over the worst phase and no good purpose could be served by removing them five miles to a hospital. No case of trench fever was brought to my notice.

During the year 102 specimens were sent to the County Hall, Wakefield, for bacteriological examination as follows :

Sputum	...	38
Diphtheria Swabs	...	17
Widal	...	18
Other specimens	...	39
		102

Maternity and Child Welfare.

In connection with the above scheme your Council have established two centres. The first one was started in October, 1916, at the Free Library, Wombwell, and held on Tuesday afternoons, the following year another was instituted at Jump on Thursday afternoons.

At both these centres antenatal work is carried out by the Medical Superintendents and during the past year there have attended 15 patients at Wombwell and 5 at Jump.

The cases are brought to the centres by the midwife engaged by the patient; she is present at the examination in order to hear what advice is given to the mother and that she may subsequently help the latter to carry it out. A printed card of general instructions is then handed to the patient to take home. This Department is not as much utilised as one would wish and it is not quite clear as to what is the cause of the non-attendance. The staff have done all they could to make this part of their work agreeable and convenient to the prospective mothers, but the fact remains only a very small percentage avail themselves of the privilege.

The midwives have been brought into co-operation and are frequently pressed to bring along their patients. Where they do not succeed, they are strongly advised to keep in touch with their patients, supply them with a printed card of advice and entreat them to call in their own Doctor, when any abnormal symptom is present.

The Infant Welfare Centres have been an unqualified success from the beginning and are now quite a popular feature in the district.

During the year, at the Wombwell Centre there have attended 2,481 mothers and children, a weekly average of 55.

Two hundred and seven new babies have joined, of these 181 were under one year and 26 over that age. The Doctor examined 514 children at this centre during the year, an average of 11·4 per session.

At the Jump Centre 65 new babies have joined during the year, of these 52 were under one year and 13 over that age. There were 888 attendances at this centre, an average of 18 weekly and 369 children were examined by the doctor, an average of 7·6 per session.

At both places tea and light refreshment at practically cost price are supplied to the mothers, many of whom have walked long distances and brought little ones they could not leave at home.

During the past year another popular feature which has been introduced at the Wombwell Centre is one for demonstrating the making of children's clothing. One of the lady voluntary helpers has this in her charge. She provides patterns and material at cost price and gives practical advice bearing upon the importance of suitable and economical clothing for their infants.

The Centres have materially assisted in supplying large quantities of dried and tinned milk to parents when there was difficulty in obtaining regular or sufficient supplies of fresh milk.

Large quantities of Virol and other malt preparations, cod liver oil emulsion, etc, have been purchased at the Centre for backward children.

The Health Visitors attend at the home a few days after the birth of the baby and keep in close touch with the mother until she is getting about; she is then advised to bring her baby to the Centre. All cases of Ophthalmia Neonatorum are attended once daily or even more frequently in bad cases to ensure proper

treatment being carried out according to the instructions of the doctor attending. Deaths in infants under one year and all still births are investigated by the Health Visitors and recorded on index cards for reference.

There have been a large number of cases of Ophthalmia Neonatorum during the past year, but in no instance were the eyes permanently damaged.

Measles were prevalent during the early part of the year as this was the tail of the extensive epidemic we experienced in 1918. One of the Health Visitors was taken off Welfare Work to visit and keep in close touch with these children until the danger period was over, in all 412 visits were made. There were seven deaths at all ages.

Whooping Cough was prevalent to a marked degree in the Hemingfield Ward particularly and was the cause of school closure at Jump; there were, however, no deaths.

Epidemic Diarrhœa was responsible for 7 deaths; the cool and at times wet weather and the consequent diminution of flies no doubt helped to keep this dread disease in check. Owing to the scarcity and cost of cows milk a large number of parents who were unable to breast feed their children obtained dried milk preparations from the Clinic and later on they used this form of milk food and the sterilised cream for the older children of the family. In my opinion this was also a considerable factor in reducing the number of Diarrhœa cases, as the food has to be freshly made with boiling water every time the child is fed or a meal prepared and so did not allow flies and other germs the same facilities for carrying on their nefarious habits of food contamination.

Sanitary Administration.

The staff comprised in the above department consists of the Medical Officer of Health, one Sanitary Inspector and a discharged disabled soldier who is being trained as Assistant to this Department.

They carry out the ordinary routine work pertaining to their office the nature and results of which may partly be ascertained from the section on Sanitary Circumstances of the district.

In addition the Sanitary Inspector follows up all notifications of infectious diseases fully investigating each case and furnishing the Medical Officer of Health with a report, which is filed for reference.

He arranges for removal of the case and carries out the necessary disinfection of the premises. Inspections are regularly carried out upon houses, premises, slaughterhouses, workshops, cow-sheds, schools, canal boats and vans; food inspection of all kinds and destruction of condemned foodstuffs are within his duties. All nuisances reported or discovered are followed up until remedied. The Sanitary Inspector is also the Officer designated to make inspections under Article 2 of Housing (Inspection of District) Regulations, 1910.

Hospital Accommodation.

All cases of infectious disease requiring removal are taken to the Kendray Hospital, Barnsley; Small Pox cases are accommodated at the Small Pox Hospital, Lund Wood. During the year the following cases were sent to the Kendray Hospital:—33 Scarlet Fever, 5 Enteric Fever, 4 Diphtheria and Membranous Croup, 1 Cerebro Spinal Fever, 2 Malaria.

Adoptive Acts.

The following Acts have been adopted by the Council ;—

Public Health Acts Amendment Act, 1890.

„ „ „ „ „ 1907.

Infectious Disease Prevention Act, 1890.

Notification of Births Act, 1907.

Private Street Works Acts, 1892.

Housing.

The total number of inhabited houses at the close of the year was 3665, of these 3431 were occupied by the working class. There were no new houses of any kind erected during the year. The Registrar General estimated the population for 1919 as being 17785, and this would give an average of 4·8 persons per house. Before the War the average was 5·2 persons ; the increase of births over deaths for the past 5 years is far in excess of the number of houses built to accommodate them at an average of 5·2 per house, and further, the number of cases of overcrowding has increased fivefold. A scheme has been submitted and approved by the Ministry of Health, as required by section 1 of the Act of 1919, for the erection of 511 houses of the artisan class to relieve the shortage, as we hold the opinion that the population is about 20,000 ; of these 450 are intended for the Wombwell area and 61 for the Hemingfield area.

During the year 48 cases of overcrowding were dealt with by the Sanitary Inspector, the difficulty however was to find them other accommodation and to do this without again causing overcrowding at times proved a stiff proposition. As this district is to a very large extent of comparatively recent growth, there is an absence of the slums so often found in older towns, the houses generally being of a good average standard.

The general character of the defects found on house inspections were principally as follows: Overcrowding, Dampness, Dirty condition, Inadequate ventilation, Defective privies and ashpits, Insanitary yards, Blocked and defective drains.

Action was taken under the Public Health Acts in the case of 31 houses, and all these notices were complied with. Statutory Notices were also served upon the owners of 38 houses under the Housing Acts and 30 of these were satisfactorily complied with.

In addition to the above, 517 informal notices were given and 493 were remedied.

The conversion of insanitary privies into W.C's. has been proceeded with whenever possible, but there is still an undue proportion of privies to those of the water carriage system, and your Council are entering upon a scheme to gradually abolish the insanitary privies altogether in course of time, as previously stated.

The supply of water to the higher levels has been inadequate or intermittent at times during the year, but it is hoped that the cause of this will shortly be removed and a good continuous supply be available in all parts of the district.

With regard to the refuse removal, another horse and cart were acquired by the Council during the year and with the help of considerable hired carting the staff are now able to keep abreast of this work.

APPENDICES. STATISTICS for the 12 months ended 31st
December, 1919.

1. Number of dwelling houses in respect of which complaints were made that they are unfit for human habitation by householders
- | | | |
|-----|-----|-------|
| ... | ... | NONE. |
|-----|-----|-------|

2. (a) Number of dwelling houses inspected under section 17
of the housing Act of 1919. ... 289
- (b) Number of houses which were considered to be unfit for
human habitation ... NONE.
- (c) Number of dwellinghouses the defects in which were
remedied without the making of closing orders 61
3. Action under section 28 of the Housing Act 1919.
- (a) Number of orders for repairs issued NONE.
- (b) Number of cases in which repairs carried out by Local
Authority ... NONE.
- (c) Number of dwelling houses voluntarily closed on notice
by owner that they could not be made fit without
re-construction ... NONE.
4. Closing Orders. .. NIL.
5. Demolition Orders ... NIL.
6. Numbers of dwelling-houses demolished voluntarily NIL.
7. Obstructive Buildings ... NIL.
8. The Staff engaged in Housing Work is composed of
- (a) Housing Committee
- (b) Surveyors
- (c) Sanitary Staff.

In conclusion, I beg to tender my thanks to the Chairman and Members of the Sanitary Committee who have rendered me every help and encouragement during the year, also to the Officials of the various departments for their kindness in supplying some of the material for this report, and finally to my Sanitary Inspector for the cordial co-operation cheerfully given at all times throughout a year of exceptional difficulties

and beg to remain, Gentlemen,

Your obedient Servant,

GEORGE E. ATKINS,

Medical Officer of Health.
